



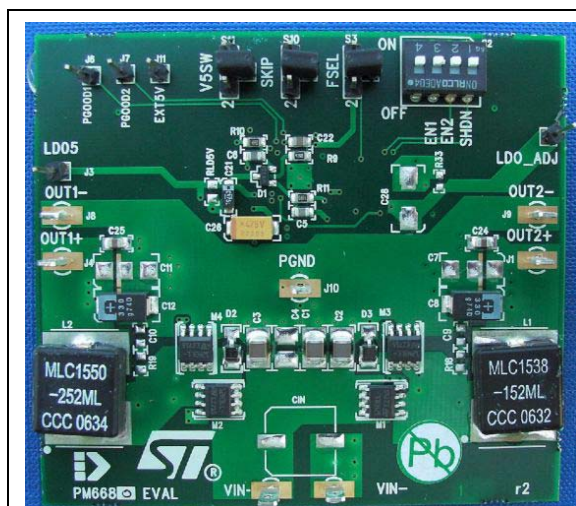
STEVAL-ISA053V1

Demonstration board for the PM6680 dual step-down controller
with adjustable output voltage for notebook power system

Data Brief

Features

- Constant on-time control allows very fast load transients
- 6 V to 28 V input voltage range
- 5 V auxiliary output voltage
- Accurate current limit with sense resistor
- Adjustable switching outputs
- Lossless current sensing
- Negative current limit
- Soft-start internally fixed at 2.8 ms
- Soft-end for output discharge
- 200 kHz / 300 kHz, 300 kHz / 400 kHz, 400 kHz / 500 kHz (5 V / 3 V selectable switching frequency)
- Selectable pulse skip and no-audible skip modes at light loads
- Independent Power Good signals



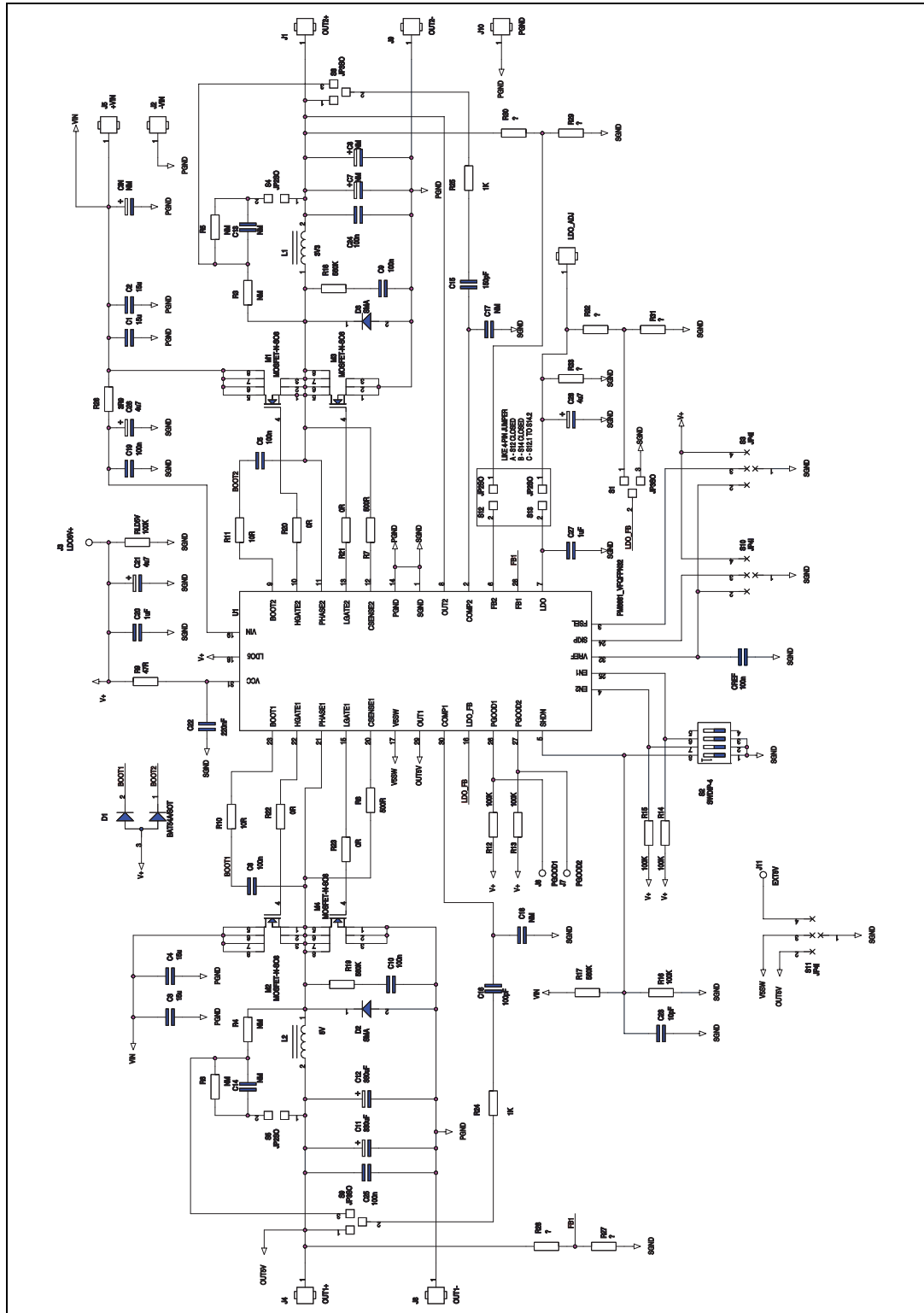
STEVAL-ISA053V1

Description

The PM6680 is a dual step-down controller with adjustable output voltages for notebook computer power systems. The STEVAL-ISA053V1 demonstration board is designed to test the performance of the PM6680 by employing a typical application circuit which allows testing of all PM6680 device functions. The board features two switching sections, with (typically) 1.5 V and 1.05 V outputs, from a 6 V to 28 V input battery voltage. The operating switching frequency of the two switching sections is 200 kHz / 300 kHz, respectively. Each switching section delivers more than 5 A of output current. Moreover, an internal linear regulator can provide 5 V @ 100 mA peak current.

1 Circuit schematic

Figure 1. Schematic diagram



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
29-Sep-2008	1	Initial release.

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